

**Abstract**

The present invention relates to a telecommunication system having a first component for providing of a dedicated channel for each one of the plurality of user equipments, a second component for assigning a carrier frequency of a set of at least first and second carrier frequencies to each one of the dedicated channels, a third component for providing of a code-multiplexed shared channel for the plurality of user equipments, a fourth component for sending of one of the first signals to one of the plurality of user equipments on the dedicated channel of that user equipment on the assigned carrier frequency by applying a transmit diversity scheme and a fifth component for sending of one of the second signals to one of the plurality of user equipments on the code-multiplexed shared channel on the carrier frequency being assigned to that user equipment by applying a multi-user diversity scheme.